



AEROSPACE MATERIAL SPECIFICATION

AMS5557™

REV. K

Issued 1955-08
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Revised 2022-09

Superseding AMS5557J

Steel, Corrosion- and Heat-Resistant, Seamless or Welded Hydraulic Tubing
18.5Cr - 10.5Ni - 0.40Ti (SAE 30321)
Solution Heat Treated
(Composition similar to UNS S32100)

RATIONALE

AMS5557K is the result of a Five-Year Review and update of the specification. The revision prohibits unauthorized exceptions (3.7, 4.4.5, 5.2.1, 8.4), updates composition testing and reporting (3.1, 3.1.1), updated condition and fabrication requirements (3.2, 3.3), controls tensile testing (3.4.1.1), updates Table 2 adding additional notes and footnotes, revises hydrostatic testing consistent with other tubing specifications (3.4.3), updates inspection (3.5), adds NDT acceptance testing (4.2.1, 4.4.3), clarifies tolerances and identification (3.6, 5.2), and allows prior revisions (6.3).

1. SCOPE

1.1 Form

This specification covers a corrosion- and heat-resistant steel in the form of seamless or welded and drawn tubing.

1.2 Application

This tubing has been used typically for parts requiring both corrosion and heat resistance, especially when such parts are welded during fabrication, but usage is not limited to such applications. The alloy provides oxidation resistance up to 1500 °F (816 °C) but is useful at that temperature only when stresses are low.

1.3 Classification

Tubing covered by this specification is classified as follows:

Type 1 - Seamless

Type 2 - Welded and drawn

1.3.1 Unless a specific type is ordered, either Type 1 or Type 2 may be supplied.

2. APPLICABLE DOCUMENTS

The issue of the following documents in effect on the date of the purchase order forms a part of this specification to the extent specified herein. The supplier may work to a subsequent revision of a document unless a specific document issue is specified. When the referenced document has been cancelled and no superseding document has been specified, the last published issue of that document shall apply.

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